DOCUMENT RESUME

ED 237 854 CG 017 108

AUTHOR McCallum, Debra Moehle; And Others
TITLE Conceptual Dimensions of Interpersonal Influence.
PUB DATE Aug 83
NOTE 18p.; Paper presented at the Annual Convention of the American Psychological Association (91st, Anaheim, CA, August 26-30, 1983). Figure 1 is marginally legible due to small print.
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Attribution Theory; Behavior Change; *Cognitive Processes; College Students; Higher Education; Individual Power; Interpersonal Competence; Interpersonal Relationship; Locus of Control; Motivation; *Schemata (Cognition); *Social Cognition
IDENTIFIERS *Compliance (Behavior); *Interpersonal Influence Process

ABSTRACT

Interpersonal power has been defined as the ability of an agent to alter the behavior of a target through means-control, attractiveness, and credibility. To identify and delineate situations of influence in personal relationships, undergraduate students either wrote influence descriptions (N=96), made similarity judgments on the original 96 descriptions (N=31), or rated 18 of the original 96 descriptions according to 20 Likert-type attribute scales (N=60). An analysis of the results showed that the most salient cognitive dimensions for naive observers of interpersonal influences were the valence of outcomes for the target and the intentions of the agent. The target's satisfaction in organizing his perceptions of influence attempts was more important than the agent's satisfaction with the outcome. Similarly, the importance of the behavior to the target was more salient than the importance to the agent. Rational approaches to interpersonal influence were likely to correspond to positive attitudes and positive target outcomes. Attributions of intentionality were found to influence interpersonal situations, particularly as the intentions affected the motives of the persons involved. (The attributes and examples of influence descriptions are appended). (BL)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED237854

Conceptual Dimensions of Interpersonal Influence

Debra Moehle McCallum

Robin H. Gurwitch

University of Alabama in Birmingham

John Schopler

University of North Carolina

Richard McCallum

Birmingham-Southern College

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Debra Moehle McCallum

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Paper presented at the meeting of the American Psychological Association, Los Angeles, August 1983.

CG 017108

Conceptual Dimensions of Interpersonal Influence

A number of theoretical and empirical efforts have been made to define, categorize, or classify the domain of events involving interpersonal influence or social power. Most of these investigations have labeled power and/or influence as the ability of an agent to alter the behavior (or attitudes) of a target. From that point the questions addressed have been those of what strategies or forms the influence might take. For example, in their classic discussion of this issue, French and Raven (1959) considered six bases of social power which distinguished the various sources of interpersonal influence that can effect changes in a target. These bases include information power, referent power, expert power, legitimate power, reward and coercive power. Kelman (1958) identified three basic processes of influence: compliance, identification, and internalization. These various psychological processes represent different ways of accepting influence and are dependent in part on the source of the influencing agent's power. The sources of power considered by Kelman included means-control, attractiveness and credibility.

More recently Falbo (1977) and Falbo and Peplau (1980) investigated power strategies by utilizing multidimensional scaling methods. Subjects wrote essays entitled "How I Get My Way" or "How I Get ____ to Do What I Want," which were coded by strategy labels provided by the researchers and rated by experts in the area of power and influence. The resulting conceptual dimensions thus reflected the cognitive organization of persons familiar with theory in the field. The situations involved influence in the traditional sense, which implies noncorrespondence of outcomes and conflict of interest between the agent and the target. The two dimensions identified in the first

investigation were rational/nonrational and direct/indirect (Falbo, 1977). The subsequent study (Falbo and Peplau, 1980) focused on intimate relationships, identifying another two-dimensional model interpreted as direct/indirect and bilateral/unilateral.

The present research represents an attempt to describe the conceptual organization of events labeled interpersonal influence. In prior research with married couples (Moehle, Gilbert, and Schopler, 1979) and with college students in laboratory settings (Layton and Moehle, 1980) it has been noted that attributions of influence occur in circumstances which involve no obvious conflict of interest and also when the agent's intentions have not been realized fully. Such events would not have been included in much of the prior research on influence. The emphasis of the present research was the identification and delineation of the broad scope of situations which are in the domain of influence in personal relationships. In order to explore the cognitive organization of such events, descriptions of influence events were obtained from both agents and targets under instructions which implied no restrictions regarding conflict of interest or actual outcome, but which requested a description of any event perceived by the participants to involve interpersonal influence. These unedited descriptions then served as stimuli for a group of raters composed of undergraduate students, rather than experts, in order to provide insight into the naive cognitive organization of influence events. These ratings were then submitted to multidimensional scaling, correlation and multiple regression analyses to identify the dimensions underlying this cognitive organization.

Method

Influence Descriptions

Personal descriptions of influence events were obtained from 96 undergraduate students (60 females, 36 males) participating in an experiment in partial fulfillment of course requirements. These participants were asked either to describe a situation in which they had "influenced or tried to influence" a roommate (or a neighbor) or to describe a situation in which a roommate (or a neighbor) had "influenced or tried to influence" them. Each subject wrote a brief description of the incident. The descriptions later were typed verbatim on individual pieces of paper to serve as stimulus items in subsequent phases of the investigation.

Similarity Judgments

Similarity judgments were made by 31 undergraduate students (16 females, 15 males) who received credit toward course requirements for their participation. These participants were instructed to read the 96 descriptions and sort them into piles or groups in such a way that the items which seemed similar to each other were in the same group and items which seemed dissimilar were in different groups. They were told to use as many piles as they wished. Upon completion of the sorting, participants were asked to provide a label for each of their piles indicating the similarities within each set of items. The number of piles produced by the subjects ranged from 5 to 21, with an average of 10.8 piles per subject. The measure of dissimilarity for a pair of items was the number of subjects (0-31) who sorted the two items into different piles.

Attribute Ratings

In order to label the dimensions of the MDS configuration, ratings were obtained for the stimulus items on a number of characteristics which might have differentiated the items. For this task the pool of items was reduced from 96 to 18, because rating all 96 descriptions was thought to be too demanding for the subjects. The reduction of items was achieved through a hierarchical clustering performed on the distances between items in the multidimensional configuration. An examination of the items within each cluster of similar items led to the selection of 18 descriptions which appeared to represent the distinguishing characteristics of the clusters and covered the full spectrum of influence events in the sample. These 18 descriptions served as the stimulus set for the rating task.

A list of 20 characteristics or attributes was compiled for the rating task. The attributes were derived from theoretical considerations (e.g., French and Raven, 1959; Schopler and Layton, 1972), previous empirical findings (Falbo, 1977; Falbo and Peplau, 1980; Moehle and Schopler, 1981), the labels provided by subjects in the sorting task, and a careful inspection of the multidimensional plots of the stimulus items. Sixty undergraduate students (30 females, 30 males) received credit toward course requirements for their participation in this phase of the study by providing ratings of the stimulus items on the attribute scales. Their judgments were made by rating all 18 items relative to one attribute scale, then proceeding to the next attribute on which all 18 items were rated anew. Each attribute was presented as a question and the scale ranged from 1 to 10, with anchors provided at each end. For example, the question "How satisfied is the target

with the outcome of the situation?" was accompanied by a scale labeled from "target very dissatisfied" (1) to "target very satisfied" (10). Each subject completed one of six random subsets composed of 10 of the 20 attribute scales, with the constraint that each scale was completed by 30 subjects (15 females, 15 males).

Results

The dissimilarity ratings derived from the sorting task were arranged in a matrix (18 x 18) which was submitted to an MDS analysis using ALSCAL (Takane, Young, and deLeeuw, 1977). Solutions were obtained in one, two, three, four, and five dimensions, yielding the following values for R^2: .234, .540, .612, .724, and .742, respectively. The largest improvement in fit corresponds to the addition of the second dimension. In comparison, adding the third, fourth, and fifth dimensions does not contribute as much to the variance accounted for by the MDS configuration. Using relative improvement in fit as a criterion, the two-dimensional solution would appear to be most appropriate.

As interpretability is another very important criterion for selection of an MDS solution, an attempt was made to interpret the two-dimensional and the three-dimensional solutions, using the data obtained from the attribute rating task. Mean ratings for each stimulus item on each attribute were computed. The correlations between the dimension coordinates for the stimulus items and their mean ratings on an attribute were used to indicate the relationship between the attribute ratings and the stimulus space. This procedure, also reported by Passer, Kelley, and Michela (1978), is just one

of several possible methods for interpreting an MDS configuration. When attribute ratings are highly correlated with the stimulus coordinates on a dimension, those attributes can be used to infer the underlying meaning of the dimension. The correlations for both the two-dimensional and three-dimensional solutions are presented in Table 1.

None of the attributes in the list was correlated highly with the third dimension of the three-dimensional solution and the same attributes were associated with Dimensions 1 and 2 in both solutions. The third dimension, therefore, does not seem to increase the interpretability of the space beyond that of the two-dimensional configuration. The solution in two dimensions appears to be the most appropriate for these data on the bases of both interpretability and goodness of fit (R^2).

The first dimension is identified by the valence of the situational outcomes, particularly from the target's point of view. The attributes closely associated with Dimension 1 are the extent to which the target is satisfied with the outcome of the influence, the influenced behavior was important to the target, the outcome of the influence improved the relationship between the agent and the target, the agent's influence strategy was rational (based on reason), the influence was good, the agent was friendly, and the agent was interested in helping the target. This dimension distinguishes influence leading to positive outcomes for the target from that which results in negative outcomes. Examples of descriptions located at each end of this dimension are presented in Table 2.

Attributes related to the second dimension are the extent to which the outcome of the event was expected by the agent and the extent to which the agent intended to influence the target. This second dimension distinguishes

planned and intentional influence attempts from influence which occurs unexpectedly or has unforeseen outcomes. Influence events exemplifying each end of Dimension 2 are presented in Table 2.

The two-dimensional configuration of the 96 stimulus items appears in Figure 1. The attributes most closely associated with each dimension are represented as vectors in the space. These vectors were plotted using the standardized regression weights resulting from a multiple regression analysis conducted for each attribute, with the dimension coordinates for the stimulus items as predictor variables and their mean ratings on the attribute as the criterion variables.

Discussion

The two-dimensional model emerging from this investigation indicates that the most salient cognitive dimensions for naive observers of interpersonal influences are the valence of outcomes for the target and the intentions of the agent. Although much of the literature in the area of interpersonal influence has focused primarily on the nature of the influence attempt (strategy or source of power), attributes based on these concepts were not closely aligned with the dimensions identified here.

With regard to the first dimension it is of interest to note that the agent's satisfaction with the outcome did not appear to be as salient to the subjects as the target's satisfaction in organizing their perceptions of these influence attempts. Similarly, the importance of the behavior to the target was more salient than the importance to the agent. This may suggest that the subjects identified more closely with the target's perspective,

although nothing in the procedure would have led them to do so. Approximately half of the descriptions they read were written from an agent's point of view and half were from a target's point of view. Accompanying this focus on the target's outcomes were some attributional considerations about the agent, such as the extent to which the agent was trying to help the target and was friendly toward the target. These attributes correspond closely to one of the dimensions identified by Passer et al. (1978) in their study of explanations for negative behavior in close relationships. Their multidimensional scaling analysis yielded a dimension distinguishing a positive versus negative attitude toward the partner. In a similar fashion, the subjects in the present study distinguished the agent's positive versus negative attitude toward the target. A positive outcome for the target was correlated with a positive attitude toward the target on the part of the agent. Of the dimensions described in Falbo's research, only the rational/nonrational distinction was also related to the first dimension of the present investigation. Rational approaches to interpersonal influence were likely to correspond to positive attitudes and positive target outcomes. Also related to the goodness of outcomes was the effect of the influence attempt on the relationship between the agent and target. Naturally enough, good, rational, friendly influence was related to an improvement in the relationship, whereas bad, irrational, unfriendly influence corresponded to an impairment in the relationship.

The second dimension indicates quite clearly that the domain of influence situations includes incidences of unintentional and unsuccessful influence, as well as the more traditional events of intentional, successful influence which is often equated to, or said to be a reflection of, social

power. This dimension can be interpreted as the extent to which the target's behavior reflects the intentions or expectations of the agent. A discrimination along this continuum was important enough to the naive subjects that it emerged as a separate dimension. Identification of this dimension may have been possible only because of the use of descriptions from targets of influence as well as agents. Unintended influence is much more likely to be perceived and reported by a target than an agent, who may remain unaware of a target's change or the source of a change. Likewise, targets may be more likely to perceive or report instances of their own noncompliance or countercompliance with an agent's influence attempt. The interpretation of this dimension also corresponds to one identified by Passer et al. (1978) distinguishing negative interpersonal behaviors which are intentional versus those which are unintentional. The similarity in these dimensions implies that attributions of intentionality are a very important consideration in a number of interpersonal situations. Passer et al. were investigating situations involving a specific conflict between two individuals in a close relationship. Although a conflict of interests often provides the occasion for an influence attempt, both dimensions identified here allow for the occurrence of influence in the absence of agent-target conflict. In many instances of reported influence the agent gives advice which has virtually no effect on his or her own outcomes and the only issue is the target's well-being. In a number of other instances, the agent simply was unaware that any influence had occurred.

This study suggests that the major organizing concepts which guide perceptions of situations involving interpersonal influence reflect concerns with the target's immediate outcomes and the motives or intentions of the agent. Interdependence theory (Kelley and Thibaut, 1978; Kelley, 1979)

appears particularly applicable in its distinction between the "given" and "dispositional" levels of interdependence. The given level of interdependence reflects the outcome contingencies present in the immediate situation which are determined primarily by situational factors and the preferences of the individuals. Our first dimension appears to reflect factors intrinsic to this given level of interdependence. The dispositional level of interdependence is the result of attributions made by interacting individuals as to the attitudes, values, and interpersonal dispositions of others which affect the manner in which they respond to patterns of interdependence at the given level. The second dimension obtained in the present study appears to align closely with the attributional processes which would characterize the dispositional level of interdependence.

These two dimensions are consistent with a functional analysis of interpersonal relations which would suggest that persons motivated to maximize interdependent outcomes would be concerned both with the effects of influence attempts upon their outcomes in the immediate situation and with the implications of such influence attempts for the intentions and motives of those persons with whom they are interdependent.

References

Falbo, T. Multidimensional scaling of power strategies. Journal of Personality and Social Psychology, 1977, 35, 537-547.

Falbo, T., & Peplau, L. A. Power strategies in intimate relationships. Journal of Personality and Social Psychology, 1980, 38, 618-628.

French, J. R. P., Jr., & Raven, B. H. The bases of social power. In D. Cartwright (Ed.), Studies in social power. Ann Arbor: Institute for Social Research, University of Michigan, 1959.

Kelley, H. H. Personal relationships: Their structures and processes. Hillsdale, NJ: Lawrence Erlbaum Associates, 1979.

Kelley, H. H., & Thibaut, J. Interpersonal relations: A theory of Interdependence. New York: Wiley, 1978.

Kelman, H. C. Compliance, identification, and internalization. Journal of Conflict Resolution, 1958, 3, 51-60.

Layton, B. D., & Moehle, D. Attributed influence: The importance of observing change. Journal of Experimental Social Psychology, 1980, 16, 243-253.

Moehle, D., Gilbert, M., & Schopler, J. Perceived influence in marriage: Preliminary concepts and measurement. Paper presented at the meeting of the Southeastern Psychological Association, New Orleans, 1979.

Moehle, D., & Schopler, J. A multidimensional scaling analysis of interpersonal influence. Paper presented at the meeting of the Southeastern Psychological Association, Atlanta, 1981.

Passer, M. W., Kelley, H. H., & Michela, J. L. Multidimensional scaling of the causes for negative interpersonal behavior. Journal of Personality and Social Psychology, 1978, 36, 951-962.

Schopler, J., & Layton, B. D. Attributions of interpersonal power and influence. Morristown, NY: General Learning Press, 1972.

Takane, Y., Young, F. W., & deLeeuw, J. Nonmetric individual differences multidimensional scaling: An alternating least squares method with optimal scaling features. Psychometrica, 1977, 42, 7-67.

Table 1

Correlations Between Stimulus Coordinates and Attribute Ratings

Attribute	Two-dimensional Solution		Three-dimensional Solution		
	Dim 1	Dim 2	Dim 1	Dim 2	Dim 3
Target satisfied	.74*	-.01	.76*	.02	-.19
Behavior important to target	.72*	-.00	.73*	.01	-.13
Improved agent-target relationship	.84*	.11	.78*	.12	-.31
Strategy rational-irrational	.75*	.33	.78*	.33	-.10
Good-bad	.80*	.11	.78*	.12	-.29
Agent friendly-unfriendly	.77*	.15	.67*	.17	-.28
Agent interested in helping target-helping self	.80*	.35	.76*	.43	-.28
Outcome expected by agent	.08	.74*	.13	.72*	.33
Agent intended to influence	-.16	.64*	-.05	.65*	.48
Agent satisfied	.57	.41	.53	.37	-.08
Behavior important to agent	.34	.35	.41	.36	.30
Agent used pressure	-.30	.53	-.18	.51	.43
Conflict between agent and target	-.48	.13	-.34	.12	.35
Active-passive	-.01	.53	.10	.53	.51
Direct-indirect	-.03	.58	.06	.58	.48
Outcome circumscribed-continuing	-.52	-.01	-.55	-.02	-.22
Method bilateral-unilateral	.17	-.35	.26	-.31	.26
Agent provided information	.30	.32	.34	.34	.34
Agent suggested reinforcement	-.02	.41	.10	.40	.59
Target identified with agent	.54	-.07	.47	-.10	-.26

* $p < .005$

Table 2

Influence Events Exemplifying Ends of Each Dimension

Dimension	Example
1. Target's Outcomes	
Positive End	A couple of weeks ago my roommate and I were not getting along too well. In fact, it had gotten so bad that we weren't speaking to each other. My "neighbor" came and talked to me and stubborn and steadfast as I was, she convinced me that it didn't matter who broke the ice as long as someone did. She made me feel like I was being childish (and I was) and through her words, facial expressions and gestures I was influenced to make amends with my roommate. (80)[a]
Negative End	Last fall I decided to buy a bicycle. I wasn't planning to spend much money because I just wanted something to get me from point A to point B. While I was looking around I talked with a neighbor. He suggested that I get an expensive bike. refused to listen at first, but he kept pointing out the advantages of this particular bicycle. Because of his influence, I spent a lot more than I had planned. (73)
2. Agent's Intentions	
Intentional End	Three weeks ago, a good friend on my hall was considering moving out of the dorm into an apartment next year. Because I wanted her to stay, I tried to influence her by pointing out all the disadvantages to apartment living, including distance from campus, seclusion from many old friends, finding furniture, preparing her own meals and other inconviences. As a result, she changed her mind, and has reapplied to live in the dorm. (54)
Unintentional End	I find that throughout the past three months I have picked up personality traits and also some part of my roommate's Southern accent. Sometimes I find myself acting like him, or doing something typical of his behavior that was not typical of mine before I met him. I also find myself talking like him, not only with his accent, but using his slang words and ways of reacting to different things. (37)

[a]Numbers correspond to item numbers on Figure 1.

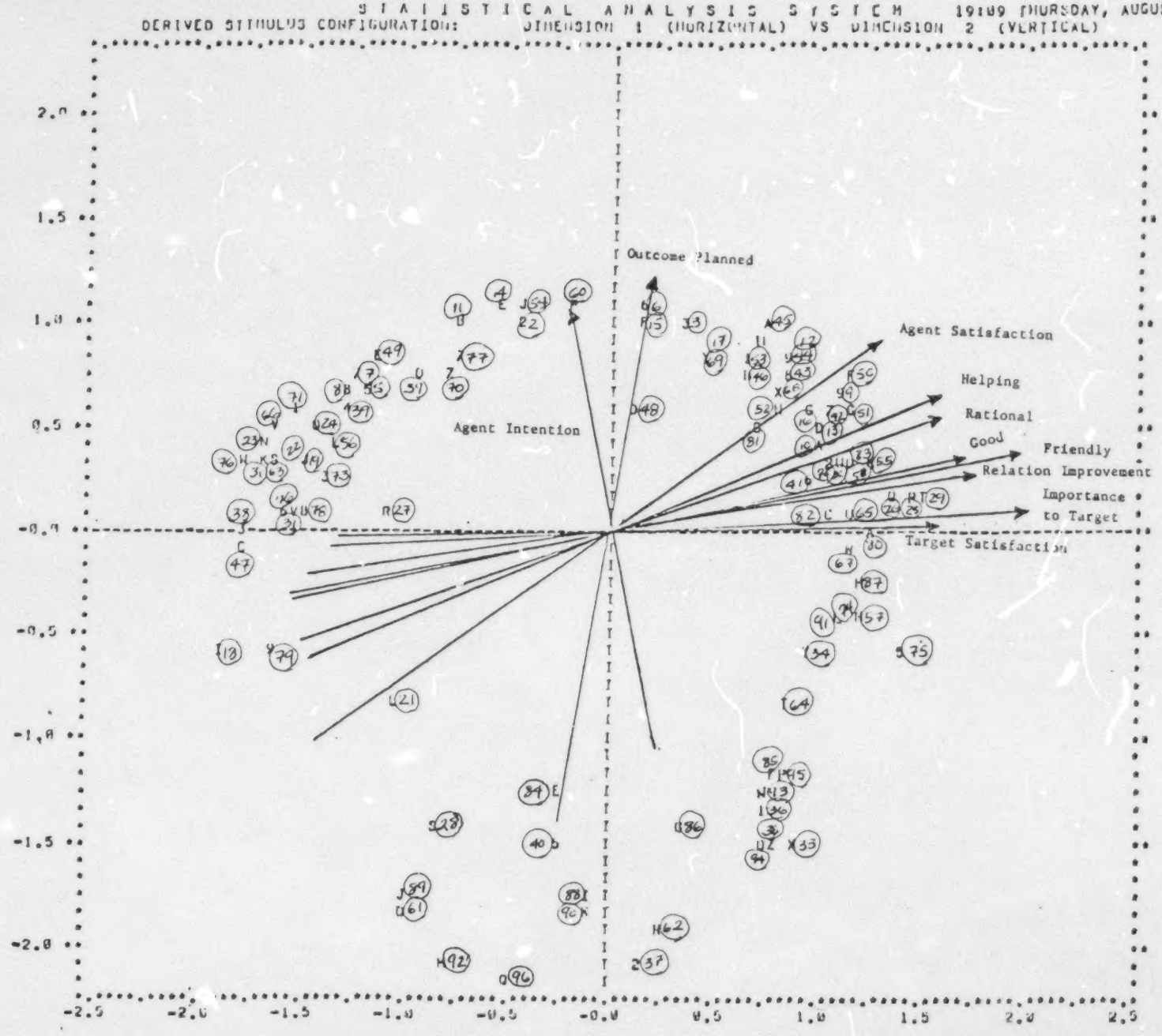

Figure 1. Two dimensional stimulus configuration and attribute vectors.